WHAT IS CLAIMED IS:

1. A transgenic *Neisseria* bacterium comprising a disrupted *pld* gene wherein the bacterium has reduced phospholipase D activity as compared to the phospholipase D activity of a corresponding wild-type *Neisseria*.
2. The bacterium of claim 1, wherein the *pld* gene is disrupted by mutagenesis.
3. The bacterium of claim 2, wherein the mutagenesis is deletion mutagenesis, insertion mutagenesis, substitution mutagenesis, or a combination thereof.
4. The bacterium of claim 1, wherein the bacterium has reduced amounts of phosphatidic acid and choline as compared to a corresponding wild-type *Neisseria*.
5. The bacterium of claim 1, wherein the bacterium has reduced toxicity as compared to a corresponding wild-type *Neisseria*.
6. The bacterium of claim 1, wherein the *pld* gene comprises nucleic acid sequence SEQ ID NO:9, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19 or SEQ ID NO:32.
7. An isolated and purified polynucleotide encoding a PLD from a *Neisseria* bacterium.
8. The polynucleotide of claim 7, wherein the polynucleotide comprises nucleic acid sequence SEQ ID NO:9, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19 or SEQ ID NO:32.
9. An isolated and purified polypeptide encoded by nucleic acid sequence SEQ ID NO:9, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19 or SEQ ID NO:32.
10. An isolated and purified polypeptide comprising phospholipase D from a *Neisseria* bacterium.
11. The polypeptide of claim 10, wherein the polypeptide comprises SEQ ID NO:4, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18 or SEQ ID NO:20.
12. A vaccine comprising an immunogenic amount of a PLD polypeptide from *Neisseria*, which amount is effective to immunize a patient against a

neisserial infection, in combination with a physiologically-acceptable, non-toxic vehicle.

13. The vaccine of claim 19, which further comprises an effective amount of an immunological adjuvant.

14. The vaccine of claim 19, wherein the polypeptide is conjugated or linked to a second peptide.

15. The vaccine of claim 19, wherein the polypeptide is conjugated or linked to a polysaccharide.

16. The vaccine of claim 19, wherein the polypeptide is encoded by a polynucleotide comprising SEQ ID NO:9, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19 or SEQ ID NO:32.

17. A method of protecting a patient against *Neisseria* colonization or infection comprising administering to the patient an effective amount of a vaccine comprising an immunogenic amount of a PLD polypeptide from *Neisseria*, which amount is effective to immunize a susceptible patient against a neisserial infection, in combination with a physiologically-acceptable, non-toxic vehicle.

18. The method of claim 15, which further comprises an effective amount of an immunological adjuvant.

19. The method of claim 15, wherein the polypeptide is conjugated or linked to a second peptide.

20. The method of claim 15, wherein the polypeptide is conjugated or linked to a polysaccharide.

21. The method of claim 15, wherein the vaccine is administered orally, mucosally or by subcutaneous or intramuscular injection.

22. The method of claim 15, wherein the polypeptide is encoded by a polynucleotide comprising SEQ ID NO:9, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, SEQ ID NO:19 or SEQ ID NO:32.

23. A method of preventing infection or colonization of *Neisseria* in a patient by administering to the patient a compound that inhibits neisserial phospholipase D.

24. The method of claim 23, wherein the compound is an anti-neisserial phospholipase D antibody.